Appl. No. 10/772,952

Paper dated October 15, 2008

Reply to Office Action dated September 5, 2008

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing Of Claims.

Claim 1 (currently amended). An image sensing apparatus having an image

sensing device, comprising:

a driving unit adapted to drive that drives the image sensing device by a plurality

of driving schemes;

a pixel defect information storage unit adapted to store that stores pixel defect

information as information about a pixel defect in the image sensing device in correspondence

with each driving scheme; and

a correction unit adapted to correct that corrects the pixel defect by referring to

the pixel defect information in said pixel defect information storage unit in accordance with the

driving scheme with which said driving unit drives the image sensing device,

wherein said correction unit, based on first pixel defect information of a first

driving scheme from the plurality of driving schemes, generates second pixel defect information

for the second driving scheme, and stores the second pixel defect information in said pixel defect

information storage unit,

wherein said correction unit corrects the pixel defect by interpolating the

defective pixel by using the pixel data of upper, lower, left and right pixels having the same color

filter.

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wherein each pixel defect within the first second pixel defect information

corresponds to a pixel defect within the second first pixel defect information, and

wherein said second driving scheme from the plurality of driving schemes drives

to read a second number of pixels of signal from the image sensing device, where the second

number is smaller than a first number of pixel of signal read from the image sensing device by

the first driving scheme.

Claim 2 (cancelled).

Claim 3 (previously presented). The apparatus according to claim 1, wherein the

first driving scheme from the plurality of driving schemes reads all pixels of the image sensing

device

Claim 4 (cancelled).

Claim 5 (original). The apparatus according to claim 1, wherein said pixel defect

information storage means is a nonvolatile recording medium.

Claim 6 (currently amended). An image sensing method using an image sensing

apparatus having an image sensing device and driving unit adapted to drive that drives the image

sensing device by a plurality of driving schemes, comprising:

generating pixel defect information in accordance with the driving scheme with

which the driving unit drives the image sensing device, such that each pixel defect within the

pixel defect information of a driving scheme corresponds to a pixel defect within each pixel

defect information of the remainder of the plurality of driving schemes,

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correcting a pixel defect by referring to pixel defect information in pixel defect

information storage unit in accordance with the driving scheme with which the driving unit drives the image sensing device, and by interpolating the defective pixel by using the pixel data

of upper, lower, left and right pixels having the same color_filter,

the pixel defect information storage unit storing the pixel defect information as

information about the pixel defect in the image sensing device in correspondence with each

driving scheme.

Claim 7 (currently amended). A computer-readable recording medium which

records a computer program for an image sensing apparatus having an image sensing device and

driving unit adapted to drive that drives the image sensing device by a plurality of driving

schemes, characterized by

generating pixel defect information in accordance with the driving scheme with

which the driving unit drives the image sensing device, such that each pixel defect within the

pixel defect information of a driving scheme corresponds to a pixel defect within each pixel

defect information of the remainder of the plurality of driving schemes,

causing a computer in the image sensing apparatus to execute processing for

correcting a pixel defect by referring to pixel defect information in pixel defect information

storage unit in accordance with the driving scheme with which the driving unit drives the image

sensing device, and interpolating the defective pixel by using the pixel data of upper, lower, left

and right pixels having the same color filter,

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the pixel defect information storage unit storing the pixel defect information as

information about the pixel defect in the image sensing device in correspondence with each

driving scheme.

Claim 8 (currently amended). A computer-readable recording medium encoded

with a computer program for an image sensing apparatus having an image sensing device and

driving unit adapted to drive that drives the image sensing device by a plurality of driving

schemes, characterized by

generating pixel defect information in accordance with the driving scheme with

which the driving unit drives the image sensing device, such that each pixel defect within the

pixel defect information of a driving scheme corresponds to a pixel defect within each pixel

defect information of the remainder of the plurality of driving schemes.

causing a computer in the image sensing apparatus to execute processing for

correcting a pixel defect by referring to pixel defect information in pixel defect information

storage unit in accordance with the driving scheme with which the driving unit drives the image

sensing device, and interpolating the defective pixel by using the pixel data of upper, lower, left

and right pixels having the same color filter,

the pixel defect information storage unit storing the pixel defect information as

information about the pixel defect in the image sensing device in correspondence with each

driving scheme.

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